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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,520	02/14/2001	Geraldine Lerebour	BJS-2365-28	7537
23117	7590	01/22/2009		
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EXAMINER				
KIM, JENNIFER M				
ART UNIT		PAPER NUMBER		
1617				
MAIL DATE		DELIVERY MODE		
01/22/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

09/782,520

**Applicant(s)**

LEREBOUR ET AL.

**Examiner**

JENNIFER MYONG M. KIM

**Art Unit**

1617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on September 30, 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13 and 16-36 is/are pending in the application.
- 4a) Of the above claim(s) 16 and 28-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13 and 17-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

The response filed September 30, 2008 have been received and entered into the application.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13 and 17-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase **“devoid of antibiotic, bacterial or fungicidal agents”** in claims 13 and **the phrase “without requiring the presence of antibiotic, bacterial or fungicidal agents”** in claims 26 and 27 render the claims vague, indefinite and contradicting to the instantly claimed invention because the phrase excludes any agent having an antibiotic, bacterial or fungicidal activity. However, this is contracting because one of ordinary skill in the art would recognize that **isopropyl myristate** is an antibiotic or bactericidal compounds because it is well known by Ringertz et al. (1982) (enclosed herein) that the claimed isopropyl myristate has antimicrobial effect. (see title, abstract).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 13, 17-24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. (U.S. Patent No. 5,416,075) of record.

Carson et al. teach Oil-in-water emulsions comprising surfactants with biospecific headgroups. Carson et al. teach that the emulsion droplets **adhere** to surfaces of microorganisms or to various biological surface bearing appropriate adhesions, thus delivering surfactants materials directly to various surfaces. Carson et al. teach that emulsion contain oil droplets which serve as a substrate for an amphipatic compound including **silicone oils, castor oil and sesame seed oil** can be employed. (abstract, column 7, line 50 - column 8). Carson et al. teach that when the desired target surface is mammalian skin hair, or nails, suitable lipophilic materials include skin anti-ageing compound, skin conditioning compound, vitamins, perfumes, UV-absorbing materials, anti-acne agents, anticellulite compounds and mixtures thereof. Carson et al. teach the oil phase constitutes from 1% to 70%, preferably from 5% to 50%, most preferably from 10% to 30% by weight of the emulsion. (column 9, lines 59-62). These amounts are within Applicants' amount set forth in claim 18 and encompass the amount set forth in claim 19. Carson et al. teach that the composition can be formulated in the form of toothpaste, cream, or gels or mouthwashes. Column 10, lines 2-5). Carson et al. teach

that the oil droplet in the emulsion provides polyvalent binding site for a microorganism or another cell on a biological surface, since numerous adhesin/receptor pairs are available to achieve adherence between a microorganisms or a biological surface and a biospecific amphipatic compound. (column 3, lines 55-61). Carson et al. teach that the emulsions may be incorporated into oral hygiene non-food compositions for compositions for topical application to skin, hair or nails. Carson et al. teaches that indigenous bacteria and other microorganisms (e.g. yeasts) present in an oral cavity or on other biological surfaces adhere to various substrates (e.g. microorganisms of the same or different genus, teeth surface, epithelial surface) via receptor-modulated recognition mechanisms and that microorganism in general express structure, generally termed "adhesions" which recognize and bind selectively to specific moieties called "receptors" found on microorganisms' surface or biological surfaces (e.g., teeth, oral cavity, skin, hair, or nails). Carson et al. teach that the adhesin/receptor modulated recognition mechanisms allow microorganisms to adhere with a high degree of selectivity and specificity to other microorganism (of same or different genus and/or species) and/or to a biological surface. Carson et al. teach that numerous skin microorganisms interact with epithelial substrates through receptor-modulated recognition between cells' surfaces and that various skin microorganisms adhere preferentially to specific sites on various body surfaces. (abstract, column 15-40, lines 50-55). Carson et al. teach that coaggregation reactions between complementary pairs of microorganisms or between microorganisms and biological surfaces can be inhibited by the presence in solution of the various moieties which are recognized by lectins and

that competition for binding sites prevents or minimizes coaggregation to adherence.  
(column 2, lines 40-50).

Carson et al. do not expressly illustrate an example of the oil droplet emulsion employing castor oil or sesame oil, and the mechanism of disrupting the ecological balance, reducing infections and the chemical characteristic of olive oil having a melting point of less than 35C and having an interfacial tension of between 6 and 27 mN/m.

It would have been obvious to one of ordinary skill in the art to modify the teaching of Carson et al. by employing any one of oil taught by Carson et al. including silicone oils, castor oil or sesame seed oil as a oil droplet component in the Carlson et al's emulsion because Carson et al. teach that these oils can be employed in the emulsion to achieve adherence between a microorganism or a biological surface and because these oils are interchangeable as equivalents. Accordingly, the instant claimed oils are obvious therefrom. One would have been motivated to make such modification in order to achieve an expected benefit of the oils employed as droplets of Carson's emulsion. There is an expectation of successfully reducing adherence of microorganism and disruption of ecological balance of the resident flora because these oils are taught by Carson et al. as useful in the oil droplet compositions which reduces the adhesion of microorganisms to the surface of the skin by adhering to the microorganisms. Further, the chemical/physical characteristics of the oil having a melting point of less than 35 degree C. and having the specified interfacial tension can be found with the same olive oil compound and within the same amounts taught by the cited references because the physical/chemical characteristic of a compound is

inseparable. Moreover, the intentions such as to reduce body odors, to use for body hygiene health care or combat comedones and/or dandruff are all obvious because that indigenous bacteria and other microorganisms (e.g. yeasts (fungus)) that causes body odors, dandruff and mycosis would obviously be removed by the teaching of Carson et al.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. (U.S. Patent No. 5,416,075) as applied to claims 13, 17-24, 26 and 27 above and in view of Cullinan (U.S. Patent No. 5,439,923).

Teachings of Carson et al. as applied as before.

Carson et al. do not teach the resident flora of *Propionibacterium acnes* set forth in claim 25.

Cullinan teaches that common, indigenous skin principal bacteria is *propionibacterium Acnes*. (column 1, lines 35-37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that oil droplet emulsion taught by Carson et al. would disrupt the ecological balance of any indigenous skin bacteria particularly *Propionibacterium acnes* because Carson et al. teaches that the emulsion adheres to indigenous bacteria and other microorganism of the skin and because Cullinan teaches that common indigenous bacteria of skin is *propionibacterium Acnes*.

One would have been motivated to employ the emulsion composition taught by Carson et al. in order to disrupt and reduce adherence of most common skin indigenous

bacteria of skin, *propionibacterium acnes*, in order to successfully achieve clean bacteria free skin in order to prevent the infection.

For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 103.

None of the claims are allowed.

### Response to Arguments

Applicants' arguments filed September 30, 2008 have been fully considered but they are not persuasive. Applicants essentially argue that the term "olive oil" is excluded from the claims with the amendment, therefore, the section 112, second paragraph, rejection of claims 13-15 and 17-27 should be withdrawn. This is not found to be persuasive because the phrase **"devoid of antibiotic, bacterial or fungicidal agents"** in claims 13 and **the phrase "without requiring the presence of antibiotic, bacterial or fungicidal agents" in claims 26 and 27** render the claims vague, indefinite and contradicting to the instantly claimed invention because the phrase excludes any agent having an antibiotic, bacterial or fungicidal agents activity. However, one of ordinary skill in the art would recognize that **isopropyl myristate** as an antibiotic or bactericidal compounds because it is well known by Ringertz et al. (1982)



(enclosed herein) that the claimed isopropyl myristate has antimicrobial effect. (see title, abstract). Applicants argue that Carson discloses emulsions containing oily phase, water phase and in which oil droplets carry amphipathic molecules wherein the hydrophilic part of the amphipathic molecule contains a moiety recognized by a microorganisms and/or by a biological surface. This is not found to be persuasive because the instantly claimed oils are disclosed by Carson. (See columns 7 and 8). Carson teaches the oils of such as silicone oils, castor oil and sesame seed oil can be employed among with olive oil. It would have been obvious to one of ordinary skill in the art to interchange one oil for another when specific oils are taught as equivalents and the utility of the Carson's emulsion droplets **adhere** to surfaces of microorganisms or to various biological surface bearing appropriate adhesions is retained. Accordingly, the instant claim is obvious therefrom. Thus, the claims fail to patentably distinguish over the state of the art as represented by the cited references.

**THIS ACTION IS MADE FINAL.** Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Communication**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER MYONG M. KIM whose telephone number is (571)272-0628. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer Kim/  
Primary Examiner, Art Unit 1617

Jmk  
January 13, 2009